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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/532,988	03/22/2000	David Barach	2386.2001-000	8379

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EXAMINER

RYMAN, DANIEL J

ART UNIT	PAPER NUMBER
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2665

DATE MAILED: 10/24/2003

6

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/532,988

Applicant(s)

BARACH, DAVID

Examiner

Daniel J. Ryman

Art Unit

2665

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 August 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-40 have been considered but are moot in view of the new ground(s) of rejection.

2. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 10-18 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with

Art Unit: 2665

which it is most nearly connected, to make and/or use the invention. Claim 10 discloses “automatically pre-gathering the statistical data” but does not disclose what does the pre-gathering. For the purposes of prior art rejections, Examiner will interpret claim 10 to read “automatically pre-gathering the statistical data in an information buffer in a controlled manner, by an element of the multi-processor system”.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 23, 29, and 36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. The term "about the rate" in claims 23, 29, and 36 is a relative term which renders the claim indefinite. The term "about" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. For the purposes of prior art rejections, Examiner will interpret the phrase “about the rate” to be “at least the rate”.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's disclosed prior art (referred to herein as Applicant) in view of Allen et al (USPN 5,495,522) in further view of Naimpally et al (USPN 5,650,825).

10. Regarding claims 1, 10, 19, 20, 26, 32, 33, 39, and 40, Applicant discloses a system, method, apparatus, and computer program for gathering statistical data from at least one element (line card) in a multiprocessor system employing a half-duplex bus by a system controller, where Examiner takes official notice that computer programs are well known in the art, comprising the steps of or means for: gathering statistical data, about a high-speed port, from at least one element (line card) in a multiprocessor system employing the half-duplex bus (page 3, line 11- page 4, line 20); and reporting the statistical data from the buffer to a system controller when polled by the system controller either for the statistical data (page 5, line 9-page 6, line 6). Applicant does not disclose automatically pre-gathering the statistical data in an information buffer in a controlled manner by an element of the multi-processor system; however, pre-gathering information and storing the information for later retrieval is very old and well known in the art. For instance, Allen teaches, in a system employing line cards, automatically pre-gathering the statistical data in an information buffer (register) in a controlled manner by an element (T1 card) where it is implicit that is done in order to provide at the time of collection the statistical data collected over a period of time (col. 76, lines 17-37). It would have been obvious to one of ordinary skill in the art at the time of the invention to automatically pre-gather the statistical data in an information buffer in a controlled manner by an element where it is implicit that is done in order to provide at the time of collection the statistical data collected over a period of time. Applicant in view of Allen does not disclose reporting the statistical data from the buffer

to a system controller when polled by the system controller for some other reason; however, Applicant in view of Allen discloses that a null is sent to the controller when the element is polled for some other reason (Applicant: page 5, line 9-page 6, line 6). Naimpally discloses, in a data transmission system, transmitting substantive data in place of null messages in order to take advantage of the "wasted resources of a NULL packet" (col. 2, line 57-col. 3, line 43; col. 4, line 66-col. 5, line 5; and col. 12, lines 1-7). It would have been obvious to one of ordinary skill in the art at the time of the invention to transmit statistical data to the system controller when polled for some other reason in order to take advantage of the wasted resources of the NULL packet that is typically transmitted in response to a poll for some other reason. Thus Applicant in view of Allen in further view of Naimpally discloses that the automatic pre-gathering and subsequent reporting reduces the number of communications and data transfer cycles required to transfer the statistical data from the element to the system controller resulting in a reduction of bandwidth consumed by gathering the statistical data about the elements via the half-duplex communication bus.

11. Regarding claims 2, 11, 21, 27, and 34, referring to claims 1, 10, 20, 26, and 33, Applicant in view of Allen in further view of Naimpally discloses that the statistical data is reported whenever the element has been polled for the statistical data or for some other reason (Applicant: page 3, line 11-page 4, line 20 and page 5, line 9-page 6, line 6 and Naimpally: col. 2, line 57-col. 3, line 43 and col. 4, line 66-col. 5, line 5). Applicant in view of Allen in further view of Naimpally does not expressly disclose that the buffer is organized in a queue and the statistical data is reported whenever the statistical data has reached the head of the queue;

Art Unit: 2665

however, Examiner takes official notice that organizing data into a queue in a storage element and reading data that is at the head of the queue is very old and well known in the art.

12. Regarding claims 3 and 12, referring to claims 1 and 10, Applicant in view of Allen in further view of Naimpally discloses that the element is a line card having at least one processor monitoring at least one communication port (Applicant: page 3, line 11-page 4, line 20).

13. Regarding claims 4 and 13, referring to claims 1 and 10, Applicant in view of Allen in further view of Naimpally discloses that the system reports the gathered statistical data to a central statistical data gathering system (Applicant: page 3, line 11-page 4, line 20 and Allen: col. 76, lines 17-37).

14. Regarding claims 5, 14, 22, 28, and 35, referring to claims 1, 10, 20, 26, and 33, Applicant in view of Allen in further view of Naimpally discloses that the statistical data includes information about an element communication port (Applicant: page 3, line 11-page 4, line 20). Applicant in view of Allen in further view of Naimpally does not expressly disclose that the buffer stores only one instance of information about a communication port at any given time; however, Applicant in view of Allen in further view of Naimpally do disclose storing at least one instance of information about a communication port at any given time (Applicant: page 3, line 11-page 4, line 20 and Allen: col. 76, lines 17-37). It is generally considered to be within the ordinary skill in the art to adjust, vary, select, or optimize the numerical parameters or values of any system absent a showing of criticality in a particular recited value. The burden of showing criticality is on applicant. In re Mason, 87 F.2d 370, 32 USPQ 242 (CCPA 1937); Marconi Wireless Telegraph Co. v. U.S., 320 U.S. 1, 57 USPQ 471 (1943); In re Schneider, 148 F.2d 108, 65 USPQ 129 (CCPA 1945); In re Aller, 220 F.2d 454, 105 USPQ 233 (CCPA 1055); In re

Saether, 492 F.2d 849, 181 USPQ 36 (CCPA 1974); In re Antonie, 559 F.2d 618, 195 USPQ 6 (CCPA 1977); In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). It would have been obvious to store a single instance because it would have been obvious to store any number of instances absent a showing of criticality by the Applicant. In addition, it is implicit that buffers have a finite capacity. As such, it would have been obvious to one of ordinary skill in the art at the time of the invention to store only a single instance of information about a communication port at any given time in order to minimize the size of the buffer required for the device.

15. Regarding claims 6, 15, 23, 29, and 36, referring to claims 1, 10, 20, 26, and 33, Applicant in view of Allen in further view of Naimpally discloses that the element makes statistical data regarding respective ports available at least as often as the system controller requires the statistical data (Applicant: page 3, line 11-page 4, line 20 and page 5, line 9-page 6, line 6; Allen: col. 76, lines 17-37; and Naimpally: col. 2, line 57-col. 3, line 43 and col. 4, line 66-col. 5, line 5).

16. Regarding claims 7 and 16, referring to claims 1 and 10, Applicant in view of Allen in further view of Naimpally discloses that the element makes the statistical data available at least one time per second (Applicant: page 3, line 11-page 4, line 20).

17. Regarding claims 8, 17, 24, 30, and 37, referring to claims 1, 10, 20, 26, and 33, Applicant in view of Allen in further view of Naimpally does not expressly disclose that the element makes the statistical data available as often as necessary but not so often that the buffer is congested by the statistical data; however, Examiner takes official notice that it is well known in the art to avoid buffer congestion since this results in loss of data due to buffer overruns.

18. Regarding claims 9, 18, 25, 31, and 38, referring to claims 1, 10, 20, 26, and 33, Applicant in view of Allen in further view of Naimpally discloses that the element reports statistical data in place of reporting a null response (Naimpally: col. 3, lines 27-43 and col. 4, line 66-col. 5, line 5).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J. Ryman whose telephone number is (703)305-6970. The examiner can normally be reached on Mon.-Fri. 7:00-5:00 with every other Friday off.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (703)308-6602. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-3900.

Daniel J. Ryman
Examiner
Art Unit 2665

DJR

Daniel J. Ryman


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